

REMARKS

In response to the Office Action dated December 28, 2006, Applicants respectfully request reconsideration based on the attached amendment and the following remarks. Applicants respectfully submit that the claims as presented here are in condition for allowance.

Claims 1-22 are pending in the present application. The Examiner has indicated that claims 11-22 are in condition for allowance, although the Examiner also objects to claims 13-15 and 19-21 for informalities. Claim 8 is indicated as being allowable but for its dependence on a rejected base claim. Applicants cordially thank the Examiner for indication of the allowable subject matter. Claims 1, 4, 8, 13 and 19 have been amended. Support for the amendment to claim 1 can be found at least on page 7, lines 13-16 of the specification as originally filed. Claims 4, 8, 13 and 19 have been amended to cure informalities associated therewith. Claims 23-32 have been added to further define the invention. Support for the new claims may be found in the Figures and specification as originally filed. More specifically, new claims 23-32 are analogous to claims 1-10. No new matter has been added with respect to the amendments. Applicants respectfully request reconsideration of claims 1-32 based on the above amendments and the following remarks.

Claim Objections

Claims 4, 8, 13-15 and 19-21 stand objected to for informalities. The Examiner states that all of the abovementioned claims contain the abbreviation TFT and that for purposes of clarity the first appearance of the abbreviation in each claim or claim group should first contain the full text of the abbreviation followed by the abbreviation.

Claims 4, 8, 13 and 19, from which claims 14, 15, 20 and 21 depend, have been amended to cure the deficiencies noted above by the Examiner.

Accordingly, it is respectfully requested that the objection to claims 4, 8, 13-15 and 19-21 be withdrawn.

Claim Rejections Under 35 U.S.C. §102

Claims 1-3, 5-7, 9 and 10 stand rejected under 35 U.S.C. §102(e) as being allegedly anticipated by Morita et al. (U.S. Patent No. 6,647,133, hereinafter “Morita”). The Examiner states that Morita discloses all of the elements of the abovementioned claims, primarily in FIG. 2, column 3, lines 19-29 and 38 through column 4, line 15 and column 5, lines 3-48. As amended, claim 1, from which claims 2, 3, 5-7, 9 and 10 depend, includes the limitation of *the second recognition section sensing a biological signal from the object using a capacitance so as to check whether or not the first recognition signal is obtained from a human being.* This limitation is not taught or suggested in the prior art. Applicants respectfully request reconsideration of claim 1 as amended, and claims 2-10 depending therefrom.

As admitted by the Examiner on page 3 of the Detailed Action, Morita teaches “wherein the **impedance** detected by the electrodes (21a and 21b) corresponds to a biological signal and is used to check whether or not the fingerprint recognition signal is obtained from a human finger.” (Emphasis added.) In particular, Morita discloses that a detector unit detects a variation of impedance values varied by the human finger contracting the electrode unit and outputs an output signal based on the variation of impedance values. A discriminator unit determines whether the human finger is in contact with the electrode unit by comparing the output signal from the detector unit with a predetermined reference value. (Abstract). Morita further discloses that since the electrode unit 22 is set so that a comparison of impedance matches only when a finger is touching the pair of electrodes 21a and 21b, the high-frequency signals from oscillator unit 20 flow into the secondary side of transformer 26 without reflecting on the electrodes if a human finger actually touches the electrodes 21a and 21b. On the contrary, if an object other than a human finger, such as an imitation finger, touches the electrodes 21a and 21b, the comparison of impedance does not match, and a detecting signal representing such an imitation finger is generated. (Col. 4, lines 18-28.)

Morita does not teach or suggest the second recognition section sensing a biological signal from the object using a capacitance so as to check whether or not the first recognition signal is obtained from a human being, as in amended independent claim 1. Therefore, it is respectfully submitted that claim 1, including claims depending therefrom, i.e., claims 2-10, define over Morita.

Accordingly it is respectfully requested that the rejection to claims 1-3, 5-7, 9 and 10 under §102(e) be withdrawn and allow the same to issue.

Claim Rejections Under 35 U.S.C. §103

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Morita in view of Kamiko (U.S. Patent No. 5,991,467, hereinafter “Kamiko”). The Examiner states that Morita discloses all of the elements of the abovementioned claim except, *expressly wherein the image recognition sensor comprises: a sensing TFT that outputs a voltage signal corresponding to the reflecting light reflected from the image pattern, a storage capacitor that charges an electron charge corresponding to the voltage signal input from the sensing TFT, and a switching TFT that outputs a voltage signal corresponding to the electron charge charged into the storage capacitor in response to a switching signal applied from an external*, which the Examiner further states is disclosed primarily in FIG. 1, column 4, lines 16-36, 38-63, column 7, lines 36-40, column 8, lines 27-36 and 59-62. Applicants respectfully traverse for at least the reasons set forth below.

First, it is respectfully noted that claim 4 depends from claim 1, which is submitted as being allowable for defining over Morita, as discussed above. Second, it is respectfully submitted that use of the alleged disclosure of Kamiko does not cure the deficiencies noted above with respect to Morita.

Accordingly ,it is respectfully requested that the rejection to claim 4 under §103(a) be withdrawn and allow the same to issue.

Conclusion

In view of the foregoing remarks distinguishing the prior art of record, Applicants submit that this application is in condition for allowance. Early notification to this effect is requested.

The Examiner is invited to contact Applicants' Attorneys at the below-listed telephone number regarding this Amendment or otherwise regarding the present application in order to address any questions or remaining issues concerning the same.

If there are any charges due in connection with this response, please charge them to Deposit Account 06-1130.

Respectfully submitted,

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